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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,526	12/13/2005	Kenichi Ishikawa	281773US0X PCT	6396
22850	7590	03/06/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MILLER, DANIEL H	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			03/06/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/560,526	Applicant(s) ISHIKAWA ET AL.	
	Examiner DANIEL MILLER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,8,9,11,21,24,27,30 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) 21,24,33-36,40 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8,9,11,27 and 30 and 37-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/17/2009 has been entered.

Election/Restrictions

2. Newly submitted claims 40 and 41 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Newly submitted claims 40 and 41 are directed to the non elected method restricted in original restriction practice and are distinct from the elected invention because they represent a separate invention in that they are a method of making the originally claimed article. Further, the claimed article is capable of being made using a materially different method. For instance, the activated carbon can be formed from different

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precursor materials as in applicant's claims (i.e. such as coconut shells or pulp, wood chips, etc.).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 40 and 41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.

3. Claims 1, 4-6, 8, 16-18, and 27, 30, and 37-39 are rejected under 35 U.S.C.

103(a) as being unpatentable over Matsuo (US 4,259,092) in view of Susumu (JP 2001-240407) further in view of Kosaka (US 5,039,651).

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4. Matsuo teaches an activated carbon sheet that is corrugated and stacked or rolled into a honeycomb shape (see figures). The activated carbon sheets that form the material are made in an exemplary embodiment from 70% activated carbon, 20 percent pulp, and 10% Polyvinyl Alcohol binder (see example 1).
5. Matsuo further teaches that the activated carbon can be treated for fire retardancy (see columns 1 and 2).
6. Matsuo does not appear to teach an activated carbon specifically derived from coconut shells (a disclosed and later claimed precursor material).
7. Susumu teaches an activated carbon product comprising fibrous material that can be in the form of a honeycomb [0010], a binder material, and a powdery activated carbon [0010]. The binder inherently has water present since it is a liquid. The activated product is capable of use for sorption and filtration of fuel systems for automobile engines.
8. The article is made by processing the activated carbon in a carbon dioxide environment at 600-1200 degrees C for one to 50 hours (see claims and [0012]). The starting material can be Coconut shells [0021]. This is substantially similar to applicant's disclosed starting material and process.
9. While Matsuo discusses adsorbing benzene, neither Matsuo or Susumu appear to discuss butane adsorbing.
10. Kosaka discusses the use of activated carbon material for adsorption and desorbing of a variety of hydrocarbon including benzenes and specifically tests its ability to absorb butane (see examples and column 3).

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11. Regarding the processing limitations of claims 7-8, and 14-18 and 27, “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”, (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

12. There is no indication that the specific molding (wet-molding) or the use of a slurry that differentiates the claimed invention’s final product from that of art of record. No patentable distinction is seen.

13. Given the similarity between the product of the claimed invention and the art of record no patentable distinction is seen between the absorption and desorption of gas vapors.

14. Further, it would be obvious to one of ordinary skill in the art at the time of the invention to provide an activated carbon material with concentrations of carbon and binders similar to Matsuo, wherein the carbon precursor material comes from coconut shells as in Susumu, that is designed for adsorbing butane, as taught by Kosaka, by

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optimizing the composition of the activated carbon, pulp and polyvinyl alcohol material by varying the constituent parts and provide the claimed concentration of pulp, (PVA), and activated carbon through routine experimentation in order to obtain an optimally functioning material for butane adsorption and desorption. No patentable distinction is seen.

15. Further regarding claims to two different (PVA) polyvinyl Alcohols, the art of record discloses generic (PVA) use, which leads one of ordinary skill would to conclude based on the lack of specificity that several if not a wide variety of (PVA)'s would be appropriate, therefore it would have been obvious to one of ordinary skill to mix two different (PVA)'s suitable for the same purpose in order to form an activated carbon sheet. No patentable distinction is seen.

16. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

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17. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuo (US 4,259,092) in view of Susumu (JP 2001-240407) further in view of Kosaka (US 5,039,651) and still further in view of Kosaka (US 5,118,329).

18. Matsuo in view Susumu and Kosaka '651, discussed above, are silent as to the use of the honeycomb structure in a fuel evaporation system having two canisters.

19. Kosaka '329 teaches a fuel evaporation system having two canisters, one canister comprising an activated carbon layer (see figures and column 1 line 15-30).

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the invention of activated carbon of the art of record in order to adsorb butane in Kosaka '651 because Susumu is used for sorption and filtration, and the other art of record are used for various hydrocarbon adsorption and desorption and therefore would be advantageously for use in fuel evaporation system having two canisters as disclosed by Kosaka '329. It would further be obvious, given the two disclosures, to connect two canisters consecutively in order to obtain the added benefit of a multiple filtrations for additive effectiveness in the filtration process.

Response to Arguments

21. Applicant's arguments with respect to all pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MILLER whose telephone number is (571)272-1534. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-14011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel Miller

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794